Review of Economic Analysis

REA Review of Economic Analysis

Managing Pandemic-induced Mental Health Concerns in the Philippines: A Strong Case for Building Public Trust and Confidence

Raymond E. Gaspar and Nina Ashley O. Dela Cruz

Volume 14, Number 2, 2022

URI: https://id.erudit.org/iderudit/1113806ar
DOI: https://doi.org/10.15353/rea.v14i2.5006

See table of contents

Publisher(s)

International Centre for Economic Analysis

ISSN

1973-3909 (digital)

Explore this journal

Cite this article

Gaspar, R. & Dela Cruz, N. (2022). Managing Pandemic-induced Mental Health Concerns in the Philippines: A Strong Case for Building Public Trust and Confidence. *Review of Economic Analysis*, *14*(2), 275–291. https://doi.org/10.15353/rea.v14i2.5006

Article abstract

Using an online survey among Filipinos jointly conducted by YouGov and the Institute of Global Health Innovation at the Imperial College London from 31 March to 30 September 2020, this paper examines the state of mental health in the Philippines during the height of the pandemic and its link to public trust in and confidence toward the government and relevant authorities. The analysis reveals that young adults, women, part-time employees, unemployed, and persons with comorbidities have faced elevated risks of psychological distress during the pandemic. Empirical results further indicate that having strong and capable governance, setting clear directions and guidelines, and effectively motivating compliant behaviors on safety protocols allay fears and concerns among these groups, and thus are instrumental to preventing potential cases of depressive and anxiety disorders.

Review of Economic Analysis 14 (2022) 275-291 1973-3909/2022275

Managing Pandemic-induced Mental Health Concerns in the Philippines: A Strong Case for Building Public Trust and Confidence

RAYMOND E. GASPAR
University of the Philippines - Diliman[*]

NINA ASHLEY O. DELA CRUZ
De La Salle University – Manila

Using an online survey among Filipinos jointly conducted by YouGov and the Institute of Global Health Innovation at the Imperial College London from 31 March to 30 September 2020, this paper examines the state of mental health in the Philippines during the height of the pandemic and its link to public trust in and confidence toward the government and relevant authorities. The analysis reveals that young adults, women, part-time employees, unemployed, and persons with comorbidities have faced elevated risks of psychological distress during the pandemic. Empirical results further indicate that having strong and capable governance, setting clear directions and guidelines, and effectively motivating compliant behaviors on safety protocols allay fears and concerns among these groups, and thus are instrumental to preventing potential cases of depressive and anxiety disorders.

Keywords: COVID-19, mental health, Philippines, institutions, public trust
JEL Classifications: H12, I12, I18, I31

1 Introduction

Before the onset of the coronavirus disease (COVID-19) pandemic, data from the Global Burden of Disease Collaborative Network suggests that mental and substance use disorders in the Philippines have been experiencing a slight downward trend, affecting around 1 in 10 of the country's total population and accounting for almost 4% of the country's total disease burden. The pandemic, however, could potentially overturn such impressive gains.

To abate the further spread of the virus that could overwhelm the healthcare system, the Philippine government has resorted to lockdowns, restricting mobility, many economic

[*] We would like to thank the participants of the Happiness and Age Conference, part of the After the Pandemic Conference Series, which was held virtually on 29 October 2021, for their invaluable comments and suggestions on the preliminary version of the paper. Corresponding author: regaspar@alum.up.edu.ph.

activities and even personal endeavors. Unintentionally, such measures have pushed the economy into a technical recession during the first half of 2020. School closures implemented all over the country have made students take their classes online and at home. But with the existing wide digital divide, poor students, especially in more remote areas, are generally at a disadvantage. Many workers, if feasible, have been advised to work from the comfort of their homes. However, a larger group of workers, amid workplace closure guidelines, have been either furloughed or faced reduced working hours, which has consequently affected their income and finances. The elderly have long been restricted from going outside due to their vulnerability to the virus.

Stay-at-home orders have left many individuals in isolation and experiencing feelings of fears and anxiety, largely over economic hardships and uncertainty. Several months have passed with lockdowns still in place, and it was revealed that the National Center for Mental Health has been receiving a rising number of calls from Filipinos facing depression and other mental health issues. From an average of 80 hotline calls per month before the COVID-19 lockdown, the center has been receiving nearly 400 calls every month (WHO Philippines 2020). Such observation provides a strong incentive to boost both physical and mental health as well as to support those people facing a much higher risk of mental distress. In doing so, the country needs to effectively overcome existing challenges related to insufficient availability of medical treatment, appropriate facilities, and mental health professionals (ADB 2020).

A growing area of research that may lead to better mental health outcomes in the pandemic era involves the crucial role of public trust. In an online survey of 501 adults in the United States, Olagoke, Olagoke, and Hughes (2020) found a negative correlation between public trust in the government regarding COVID-19 and psychological distress, even after controlling for sociodemographic and socioeconomic factors. An online survey of Iranian citizens conducted in March 2020 revealed that a strong public trust, especially among authorities handling COVID-19 situation, is linked with lower psychological problems and disorders (Mohammadi et al 2020). Relatedly, Jakovljevic et al (2020) posited that public distrust could lead to reduced mental health, albeit such a relationship also exhibits bidirectionality.

Against this background, this paper aims to contribute to the literature advancing knowledge on the link between public trust and mental health within the context of a public health crisis, such as the COVID-19. Using the individual online survey responses collected from the Philippines by the Imperial College London-YouGov Covid 19 Behaviour Tracker Data Hub between 31 March and 30 September 2020 involving over 6,000[1] respondents, the paper empirically examines the state of mental health among Filipinos during the pandemic and how

[1] The original number of observations in the data file is 12,002 but when excluding the ones with missing information on relevant individual-level characteristics and questions, the effective sample drops to 6,402 respondents.

it is influenced by their sentiment toward the government's handling of the situation as well as their confidence in the national healthcare system.

The paper reveals the disadvantaged groups that faced higher risk of enduring mental health or psychological distress. Young adults and female respondents have exhibited higher odds of experiencing considerable degree of mental health concerns, which can be linked to school closures and the transition to online classes. Women, especially mothers, are left with more household duties. Part-time employees and unemployed workforce have been worse off mentally relative to full-time employees amid workplace closures and limited job prospects, driving economic uncertainty over their income, value of their savings and spending capacity.

Consistent with other studies across different country contexts, our analysis also finds a strong link between public trust and confidence in the government and public healthcare system and mental health. Results seem to indicate that, among others, Filipinos need a strong and capable governance in time of the pandemic, a leadership that could set clear directions and guidelines to allay their fears and concerns and ultimately prevent psychological distress. The paper identifies that such a link is largely mediated by an individual's compliance with safety protocols and better awareness about COVID-19. Intuitively, individuals expressing stronger trust and confidence in the capacity of the authorities handling the pandemic are more likely to comply with social distancing and other safety protocols.

The next section discusses in detail the data used and the econometric strategy conducted in order to examine the individual-level variations in the state of mental health among Filipino adults during the height of the pandemic, with special focus on how their trust and confidence in the government and health authorities influence such outcome. Section 3 presents general findings while Section 4 concludes and suggests policy implications.

2 Materials and Methods

2.1 Data

The paper uses the individual-level online survey collected from the Philippines by YouGov in partnership with the Institute of Global Health Innovation at the Imperial College London. The data repository, Covid 19 Behaviour Tracker Data Hub[2], stores the publicly available raw data for the Philippines spanning the period between 31 March 2020 and 30 September 2020.

[2] Detailed information including the codebook and raw data are available at https://github.com/YouGov-Data/covid-19-tracker. Alongside the Philippines, the survey was also conducted in Australia; Brazil; Canada; People's Republic of China; Denmark; Finland; France; Germany; Hong Kong, China; India; Indonesia; Italy; Japan; Malaysia; Mexico; Netherlands; Norway; Saudi Arabia; Singapore; South Korea; Spain; Sweden; Taipei, China; Thailand; United Arab Emirates; United Kingdom; United States; and Viet Nam.

The weekly online survey seeks to understand people's behaviors in response to COVID-19 by interviewing around 21,000 individuals aged 18 and above every week in over 29 countries, including the Philippines. To uphold national representativeness, a weighting variable is also provided, typically based on age, gender and region (Jones, Imperial College London Big Data Analytical Unit, and YouGov Plc. 2020).

The initiative is designed to draw important behavioral implications of the pandemic, with the end goal of helping public health authorities in their efforts to limit the impact of the disease. The survey solicits information on testing, symptoms, self-isolation behavior and practices, and compliance behaviors in wearing face masks, going outdoors, and working outside home, among others. Contextual information such as gender, age, region (within the country), number of people in the household, number of children in the household, health conditions and working status are also available while safeguarding anonymity of respondents.

Mental health indicator

The paper uses the following survey information to measure the state of mental health of an individual:

a. Frequency of having little interest or pleasure in doing things;
b. Frequency of feeling down, depressed, or hopeless;
c. Frequency of feeling nervous, anxious, or on the edge; and
d. Frequency of relentless worrying.

The survey respondents choose either of the following: (i) not at all, (ii) several days, (iii) more than half the days or (iv) nearly every day. The first two possible answers are consistent with the Patient Health Questionnaires (PHQ-2) and the latter two are based on the Generalized Anxiety Disorder (GAD-2) tool. The PHQ-2 asks about the frequency of a depressed mood and screens for depression in a "first-step" approach while the GAD-2 acts as an initial screening tool for generalized anxiety disorder. PHQ-2 and GAD-2 scores can be calculated by assigning values[3] to the responses and taking the sum of responses to the two questions. Scores range from 0 to 6, with larger values, especially 3 or greater, entailing depressive or anxiety disorder.

Public trust and confidence in government handling of COVID-19 situation

To gain insights on the link between public trust and confidence and mental health of individuals during the pandemic, the paper uses the following survey questions:

[3] 0 for not at all, 1 for several days, 2 for more than half the days and 3 for nearly every day.

a. How well or badly do you think the government is handling the issue of the COVID-19? The respondents have the following choices: (i) very well, (ii) somewhat well, (iii) somewhat badly, and (iv) very badly.
b. How much confidence do you have in the national healthcare system to respond to a COVID-19 outbreak? The respondents have the following choices: (i) a lot of confidence, (ii) a fair amount of confidence, (iii) not very much confidence, and (iv) no confidence at all.

Due to data limitation, the paper depends on the first question as the primary measure of public trust in the government regarding COVID-19. An individual's perception about the government's efforts and measures in fighting the pandemic intuitively gives some sense of how an individual trusts the authorities to manage the situation. Meanwhile, the second question relates to public confidence in the healthcare system in the country. The paper expects that public trust and confidence in the relevant authorities have implications for an individual's state of mental health, with those expressing stronger trust and confidence less likely to experience psychological distress in terms of depression and anxiety.

It is important to note, however, that the information and results which can be derived using the online survey data could potentially suffer from sample selection bias. There is unintended non-representation among individuals without any access to the internet and technology. In such cases, the analysis might unnecessarily capture how technology and internet access also impact mental health, which is evident in recent studies under the context of the pandemic. For example, Zhao and Zhou (2020) found worse mental health linked with the higher level of social media use.

2.2 Econometric Strategy

Considering the ordinal nature of the mental health indicators with four Jcategorical responses, the paper estimates ordinal logistic regression models and the corresponding event odds $\theta_j$taking the following form:

$$ln(\theta_j) = \alpha_j - \beta X_i, where\ \theta_j = \frac{P(x)}{1-P(x)}, j = 1, \dots, J-1\ and\ i = 1 \dots n \quad (1)$$

Instead of a customary plus sign before the coefficients, we intentionally adopt a minus sign to imply that larger coefficients indicate an association with more frequent events of losing interest; feeling down, depressed, or hopeless; feeling nervous or anxious; and relentless worrying. We attempt to control for potential confounding factors: thus the inclusion of a column vector of explanatory variables X_i for every individual i. Based largely on the

availability of information from the survey, the paper controls for respondent i's age, sex, economic status, household size and comorbidity status. Region and week dummies are also added to control for the differential quarantine status due to the localized lockdowns implemented all over the country, which also vary from time to time pursuant to guidelines and resolutions set forth by the country's COVID-19 Inter-Agency Task Force for the Management of Emerging Infectious Diseases.

Table 1 presents descriptive statistics of the variables used in the analysis. The age of the respondents is highly distributed with a mean of 31 years old. The majority are female, representing around 59% of the sample. More than half of the respondents are in the labor force: 39% are working full time, 28% are part time, and 7% are unemployed. The average household size is quite high at almost 5 members. Furthermore, one in three of the sample observations have been diagnosed with pre-existing health conditions that make them more vulnerable to COVID-19 infection.

The table suggests that, during the period of observation, respondents have, on average, experienced low to moderate cases of psychological and mental health distress. As such, the computed average scores of PHQ-2 and GAD-2 of 2.25 and 2.28, respectively, are quite close to the optimal cutoff of 3, which indicates a likely case of depressive and anxiety disorder. The descriptive statistics of the data also reveals that the public trust during the period is relatively low alongside public confidence toward the national healthcare system.

Using the PHQ-2 and GAD-2 scores as the dependent variables, the paper attempts to validate baseline results in equation (1). Ordinary least squares regressions are estimated with the similar vector of explanatory variables as in the baseline model.

3 Empirical Findings

This section presents the estimation results of equation (1) alongside the results of the alternative specification model. Broadly speaking, Table 2 reveals that the pandemic has posed a varying impact on mental health across different groups of individuals. The results highlight the individuals who have faced a higher risk of experiencing psychological distress induced by the pandemic.

The baseline ordered logistic regressions find robust evidence that women have exhibited higher odds of experiencing considerable degree of mental health concerns. It is generally consistent with findings in a developed country context. Li and Wang (2020) found that women and younger population groups suffered higher risks of general psychiatric disorders and loneliness during the height of the pandemic in the United Kingdom.

Table 1. Summary statistics

Variable	No. of obs.	Mean	Std. Dev.	Min	Max
Age	6,402	31.43	11.83	18	86
Sex *(Female = 0, Male = 1)*	6,402	0.41	0.49	0	1
Economic status					
Full time employed	6,402	0.39			
Part time employed	6,402	0.28			
Unemployed	6,402	0.07			
Not working	6,402	0.07			
Retired	6,402	0.13			
Full time student	6,402	0.03			
Other	6,402	0.02			
Household size	6,402	4.85	1.88	1	8
Pre-existing health conditions *(No = 0, Yes = 1)*	6,402	0.30	0.46	0	1
Mental health indicators *(0 = not at all, 1 = several days, 2 = more than half the days, 3 = nearly every day)*					
Little interest or pleasure in doing things	6,402	1.19	0.98	0	3
Feeling down, depressed, or hopeless	6,290	1.06	0.99	0	3
Feeling nervous, anxious, or on edge	6,288	1.07	0.97	0	3
Not being able to stop or control worrying	6,320	1.22	1.01	0	3
PHQ-2 score *(0-6, depressive disorder more likely)*	6,290	2.25	1.67	0	6
GAD-2 score *(0-6, anxiety disorder more likely)*	6,225	2.28	1.77	0	6
Public trust and confidence indicator					
How well or badly do you think the government is handling the COVID-19 situation? *(0 = very badly, 1 = somewhat badly, 2 = somewhat well, 3 = very well)*	6,402	1.61	0.98	0	3
How much confidence do you have in the national healthcare system to respond to COVID-19? *(0 = no confidence at all, 1 = not very much confidence, 2 = a fair amount of confidence, 3 = a lot of confidence)*	6,348	1.68	0.90	0	3

Source: Authors' calculations.

Table 2. Individual Characteristics and State of Mental Health During the Pandemic

Variables	Baseline				OLS Regression	
	Little interest or pleasure in doing things	Feeling down, depressed, or hopeless	Feeling nervous, anxious, or on edge	Not being able to stop or control worrying	Depression (PHQ-2 score)	Anxiety (GAD-2 score)
Age	-0.038***	-0.039***	-0.032***	-0.030***	-0.035***	-0.029***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Sex (0 = Female, 1 = Male)	-0.140***	-0.282***	-0.307***	-0.364***	-0.206***	-0.349***
	(0.048)	(0.049)	(0.049)	(0.049)	(0.043)	(0.046)
Economic status (Base: Full time employed)						
Part time employed	0.162***	0.224***	0.101*	0.008	0.230***	0.068
	(0.059)	(0.060)	(0.059)	(0.059)	(0.052)	(0.056)
Unemployed	0.018	0.227**	0.125	0.015	0.173**	0.084
	(0.099)	(0.101)	(0.099)	(0.099)	(0.087)	(0.093)
Not working	-0.017	-0.012	-0.199**	0.102	0.013	-0.057
	(0.098)	(0.098)	(0.099)	(0.097)	(0.085)	(0.092)
Retired	0.288***	0.396***	0.136*	0.230***	0.393***	0.223***
	(0.074)	(0.075)	(0.075)	(0.075)	(0.065)	(0.070)
Full time student	0.171	-0.082	-0.358**	-0.178	0.151	-0.178
	(0.161)	(0.171)	(0.171)	(0.162)	(0.136)	(0.148)
Other	0.212	-0.072	0.147	0.195	0.060	0.207
	(0.156)	(0.162)	(0.162)	(0.164)	(0.138)	(0.151)
Household size	0.006	-0.024*	-0.031**	-0.014	-0.010	-0.023*
	(0.013)	(0.013)	(0.013)	(0.013)	(0.011)	(0.012)
Pre-existing health condition (1 if Yes, 0 otherwise)	0.229***	0.397***	0.541***	0.348***	0.313***	0.457***
	(0.053)	(0.054)	(0.054)	(0.053)	(0.046)	(0.050)
Observations	6,402	6,290	6,288	6,320	6,226	6,156
LR chi2	400.9	478.9	384.3	311.1		
Prob > chi2	0.000	0.000	0.000	0.000		
Pseudo R2	0.025	0.030	0.024	0.019	0.078	0.058

LR = Likelihood Ratio, GAD-2 - Generalized Anxiety Disorder, OLS = ordinary least squares, PHQ-2 - Patient Health Questionnaires.

Note: Week and region dummies are also included as controls. OLS estimates have constant terms and report R-squared.

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Source: Authors' estimates.

The result can be linked to measures implemented to abate further infections and rising cases, specifically the school closures and transition to online classes as well as stay at home orders. During the pandemic, women, especially mothers, faced a greater challenge of juggling paid work and domestic responsibilities. In a rapid gender assessment conducted in the National Capital Region from 15 April to 27 May 2020, Dizon and Medina (2020) found that Filipino women, on average, have spent 7 hours on housework, which is up from only 4 hours before the COVID-19 pandemic. Relatedly, in a survey of South Asian families living in the United States and Canada, Kaur and Desai (2021) revealed that women were evidently assuming more of the domestic burden of housework and childcare during the pandemic.

It is also evident in Table 2 that the younger adults have been relatively more at risk of episodes of psychological distress in time of the pandemic. Compared to selected countries in Asia, Shaikh et al (2021) found higher scores on stress, anxiety, and depression among Filipino young adults aged 18–30. During the height of the pandemic, Filipino youths faced disruptions in education and training, delayed school-to-work transitions and a disproportionate share of job losses (Khatiwada 2022). Fernandez (2021) cited that accumulating worries associated with missing traditional milestones and losing economic opportunities and vital relationships are leading younger adults into mental distress amid the ongoing crisis.

Another group of individuals disproportionately feeling the brunt of the pandemic were part-time employees and, to some extent, unemployed individuals. Relative to full-time employees, these workforce groups are observed to have worse mental states during the pandemic that can be largely attributed to unprecedented workplace closures, reduced working hours and limited job prospects. These individuals, often earning irregular wages and salaries with limited to non-existent social protection, faced much higher economic uncertainty, which could potentially lead to deterioration of their mental state. Lastly and expectedly, the level of mental health concerns among people with underlying health conditions have been consistently higher than their healthier counterparts. Their pre-existing health conditions are making them more vulnerable to contracting the virus, which may have been adding to their worries during the pandemic.

3.1 Strong Public Trust Leads to Better State of Mental Health

Table 3 supports our hypothesis that individuals expressing strong public trust, which in this paper is measured by their confidence in how well the government is handling the ongoing COVID-19 situation, are, on average, less likely to experience depression and anxiety. It is also intuitive to see larger coefficients estimated on higher levels of trust.

Table 3. Public Trust and State of Mental Health During the Pandemic

Variables	Baseline				OLS Regression	
	Little interest or pleasure in doing things	Feeling down, depressed, or hopeless	Feeling nervous, anxious, or on edge	Not being able to stop or control worrying	Depression (PHQ-2 score)	Anxiety (GAD-2 score)
Perception on how well the government handles the COVID-19 situation (Base: Very badly)						
Somewhat badly	-0.272***	-0.368***	-0.473***	-0.389***	-0.357***	-0.484***
	(0.074)	(0.075)	(0.075)	(0.075)	(0.065)	(0.069)
Somewhat well	-0.384***	-0.607***	-0.774***	-0.640***	-0.537***	-0.757***
	(0.067)	(0.069)	(0.069)	(0.068)	(0.059)	(0.063)
Very well	-0.531***	-0.948***	-1.132***	-0.944***	-0.724***	-1.043***
	(0.081)	(0.083)	(0.083)	(0.083)	(0.070)	(0.075)
Observations	6,402	6,290	6,288	6,320	6,226	6,156
LR chi2	448.8	622.2	594.1	457.6		
Prob > chi2	0.000	0.000	0.000	0.000		
Pseudo R2	0.028	0.040	0.038	0.028	0.096	0.091

LR = Likelihood Ratio, GAD-2 - Generalized Anxiety Disorder, OLS = ordinary least squares, PHQ-2 - Patient Health Questionnaires.

Note: Same set of regressors as in Table 2 is included alongside week and region dummies. OLS estimates have constant terms and report R-squared.

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Source: Authors' estimates.

The Philippine government drew on a science advisory system in its fight against the pandemic, with policies and measures generally informed by epidemiological models and knowledge. However, during this dire period, other issues surfaced, including accusations of inefficient spending of public funds; the lack of transparency, urgency, and competency of relevant public officials; and issues related to vaccine procurement. These explain the relatively high level of negative online sentiments revealed in the latest Philippine Trust Index. Analyzing online conversations covering the period, August 2020 to August 2021, the EON Group (2021) found that 44%[4] expressed distrust associated with perceived insufficient response to the pandemic and the issue of corruption at the Philippine Health Insurance Corporation. Across generations, the same report found that the Millennials have expressed very low trust ratings toward the government relative to the Gen X and Baby Boomers. Such intergenerational variation in public trust could somehow explain the disproportionate mental health impact of the pandemic among younger adults in Table 2.

[4] 20% expressing trust while 36% are neutral (EON Group 2021).

These empirical findings are robust across specification and conform to recent evidence in different country contexts. In the United States, Olagoke, Olagoke, and Hughes (2020) found a negative relationship between public trust and psychological distress. In Iran, Mohammadi et al 2020 revealed that citizens' strong public trust toward authorities handling COVID-19 is linked with lower psychological problems and disorders. Indeed, building public trust makes policy sense and should always be considered in formulating public initiatives addressing mental health issues.

3.2 Confidence toward the National Healthcare System in Responding to COVID-19 Allays Fears and Lowers Likelihood of Psychological Distress

Table 4 provides evidence that public confidence in the healthcare system could reduce the probability of undergoing depressive and anxiety disorders, other factors remaining constant. Further, the results show that the greater confidence toward the public health institutions and authorities the more likely individuals have a better state of mental health during the pandemic. Citizens who are convinced about the capability, reliability, and efficiency of public institutions to resolve issues related to the pandemic could have peace of mind and a feeling of assurance. The success of healthcare authorities in mobilizing scientific expertise to tackle rising forms of misinformation about the virus and measures, such as vaccination programs, also play a crucial role.

3.3 Pathway Analysis: The Role of Compliance Behavior

The study conducts pathway analysis to strengthen the link between public trust and mental health. Equation (1) is adjusted by replacing the original dependent variable with compliance behavior involving different safety COVID-19 protocols. The survey asked the respondents how compliant they are with safety protocols, including wearing face masks and avoiding crowded areas. Responses are: (i) not at all, (ii) rarely, (iii) sometimes, (iv) frequently, and (v) always. As such, ordered logistic regressions are also conducted with a similar set of controls.

We expect that the individuals showing strong trust in the government are more likely to comply with recommended safety measures and practices. During the pandemic, a trusted government and public authorities could effectively demand a cooperative and considerate attitude from the people. Several studies have found evidence supporting the crucial role of trust in institutions for compliance with social distancing measures. In a multi-country analysis, Pak, McBryde, and Adegboye (2021) highlighted the role of public trust in government and relevant institutions in ensuring compliance to safety protocols. In Italy, Durante et al. (2020) found that mobility declined disproportionately in areas with higher civic capital. Across Europe, Bargain and Aminjonov (2020) revealed that high-trust regions significantly comply more with regulations involving non-essential mobility than their low-trust region counterparts.

Table 4. Confidence in Public Healthcare System and State of Mental Health During the Pandemic

Variables	Baseline				OLS Regression	
	Little interest or pleasure in doing things	Feeling down, depressed, or hopeless	Feeling nervous, anxious, or on edge	Not being able to stop or control worrying	Depression (PHQ-2 score)	Anxiety (GAD-2 score)
Confidence toward the public healthcare system to respond to the COVID-19 (Base: No confidence at all)						
Not very much confidence	-0.389***	-0.654***	-0.605***	-0.527***	-0.583***	-0.631***
	(0.083)	(0.084)	(0.084)	(0.084)	(0.072)	(0.077)
A fair amount of confidence	-0.543***	-0.795***	-0.868***	-0.741***	-0.720***	-0.877***
	(0.080)	(0.081)	(0.081)	(0.081)	(0.069)	(0.074)
A lot of confidence	-0.716***	-1.175***	-1.255***	-1.153***	-0.957***	-1.237***
	(0.091)	(0.093)	(0.093)	(0.092)	(0.078)	(0.084)
Observations	6,348	6,237	6,237	6,268	6,159	6,094
LR chi2	467.6	645.8	578.1	475.4		
Prob > chi2	0.000	0.000	0.000	0.000		
Pseudo R2	0.029	0.042	0.037	0.030	0.102	0.094

LR = Likelihood Ratio, GAD-2 - Generalized Anxiety Disorder, OLS = ordinary least squares, PHQ-2 - Patient Health Questionnaires.

Note: Same set of regressors as in Table 2 is included alongside week and region dummies. OLS estimates have constant terms and report R-squared.

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Source: Authors' estimates.

Table 5 presents the results of the pathway exercise and provides an apparent link between public trust and compliance behavior, particularly among individuals showing stronger public trust. This is observed in compliance behavior in many safety instructions and practices, such as hand washing and sanitizing practices, stay at home orders, and social distancing. This finding is also evident in the study by Saechang, Yu, and Li (2021) using a survey among Thai population to examine the relationship between public trust and the compliance in adopting personal protective measures introduced during the early phase (between February and March 2020) of the COVID-19 outbreak in Thailand. They found a positive and significant relationship between trust in the government and the respondents' likelihood to comply with the safety precautions.

Table 5. Public Trust and Compliance to Safety Protocols During the Pandemic

Perception on how well the government handles the COVID-19 situation (Base: Very badly)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	Wearing face mask	Washing hands	Sanitizing hands	Covering nose and mouth when sneezing or coughing	Avoided contact with people who have symptoms	Avoided going out in general	Avoided going to hospital
Somewhat badly	-0.318**	-0.104	-0.259***	-0.220*	-0.002	-0.186**	-0.136
	(0.161)	(0.108)	(0.096)	(0.116)	(0.111)	(0.078)	(0.091)
Somewhat well	-0.220	0.168*	-0.026	0.178	0.109	-0.071	-0.125
	(0.150)	(0.102)	(0.090)	(0.111)	(0.102)	(0.072)	(0.083)
Very well	0.199	0.703***	0.514***	0.463***	0.481***	0.380***	0.108
	(0.190)	(0.136)	(0.116)	(0.142)	(0.132)	(0.089)	(0.101)
Observations	6,402	6,402	6,402	6,402	6,402	6,402	6,402
LR chi2	224.5	249.9	226.1	253.2	162.4	175.2	180.9
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.055	0.038	0.025	0.042	0.023	0.013	0.015

	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Variables	Avoided taking public transport	Avoided working outside your home	Avoided having guests to your home	Avoided small social gatherings (not more than 2 people)	Avoided medium-sized social gatherings (3- 10 people)	Avoided large-sized social gatherings (more than 10 people)	Avoided crowded areas
Somewhat badly	-0.133*	-0.138	-0.150*	-0.117	-0.212**	-0.181*	-0.168*
	(0.079)	(0.106)	(0.079)	(0.080)	(0.085)	(0.098)	(0.095)
Somewhat well	-0.161**	-0.342***	-0.240***	-0.140*	-0.163**	-0.210**	-0.035
	(0.073)	(0.095)	(0.072)	(0.073)	(0.078)	(0.090)	(0.088)
Very well	0.189**	0.104	0.235***	0.325***	0.238**	0.088	0.475***
	(0.088)	(0.113)	(0.088)	(0.090)	(0.096)	(0.111)	(0.113)
Observations	6,402	3,842	6,402	6,402	6,402	6,402	6,402
LR chi2	262	248.7	338.3	225.6	237	246.4	160.4
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pseudo R2	0.017	0.025	0.023	0.016	0.019	0.025	0.018

LR = Likelihood Ratio. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Note: Same set of regressors as in Table 2 is included alongside week and region dummies.

Source: Authors' estimates.

Relatedly, in another study across 38 European countries, Chan et al (2020) found that regions expressing high trust in the government but low confidence in the healthcare system were more likely to observe mobility restriction mandates, strongly affirming the link between strong public trust and compliance behavior.

4 Conclusion and Policy Implications

The pandemic has evidently posed a threat to the state of mental health among Filipinos, which may undermine gains reaped in recent decades in terms of reductions in the incidence of mental and substance use disorders. Community quarantine and social distancing measures can make individuals feel lonely and isolated; if they are aggravated by worries of getting infected by the virus, this situation may trigger depressive and anxiety disorders.

Our findings lend support to formulating targeted policy initiatives toward younger adults, women, part-time employees, the unemployed, and people suffering from pre-existing health conditions, much of which relates to adopting strategic solutions and guidelines in handling the pandemic. While vaccination programs are ramped up, the Philippines' COVID-19 Inter-Agency Task Force for the Management of Emerging Infectious Diseases should facilitate safe reopening of schools and face-to-face classes and forge strategic partnership with the business sector to ensure welfare of workers. If feasible, labor market interventions, such as career guidance and skills training, should enable individuals to navigate into a more digitized economic environment.

Evidently, with the ongoing pandemic, building public trust makes policy sense and should always be considered in formulating public initiatives addressing mental health issues. It is quite unfortunate that additional accusations of inefficient spending of public funds, lack of transparency, urgency, and competency of relevant public officials, and issues related to vaccine procurement surfaced during this dire period.

Leadership and institutional quality and a reliable public healthcare system are needed to build public trust. A trusted government with trusted public authorities could effectively demand a cooperative and considerate attitude from the people and induce compliant behaviors from them, which are observed in many safety instructions and practices, such as hand washing and sanitizing practices, stay at home orders and social distancing. Relevant public authorities should therefore show strong and capable governance that is able to set clear directions and guidelines.

As the mental health threat of the COVID-19 pandemic remains amid the spread of the Omicron variant, we call for the Philippine government to intensify a people-centered approach in defining COVID-19 guidelines, upholding truths, and battling disinformation. Government actions should be transparent, collaborative, consistent, and credible. In partnership with the scientific community and relevant private sectors, public health authorities should neutralize any form of misinformation or conspiracies regarding COVID-19 and vaccines.

Indeed, as Mazzucato and Kattel (2020) argued, governments have a very important role to play in this pandemic era, which involves strengthening their capacity to adapt and learn, align public services and citizen needs and effectively administer data and digital platforms. In the medium to long run, the country also needs to effectively overcome existing challenges of insufficient availability of medical treatments, appropriate facilities, and mental health professionals.

References

Asian Development Bank, (2020) Wellness in Worrying Times, Theme Chapter in Asian Development Outlook Update 2020. https://www.adb.org/what-we-do/economic-forecasts/september-2020/theme-chapter.

Bargain, O. and U. Aminjonov (2020), Trust and Compliance to Public Health Policies in Times of COVID-19. *Journal of Public Economics*, 192(104316), pp. 1–13. https://doi.org/10.1016/j.jpubeco.2020.104316.

Chan, H. F., Brumpton, M., Macintyre, A., Arapoc, J., Savage, D. A., Skali, A., Stadelmann, D., & Torgler, B. (2020), How confidence in health care systems affects mobility and compliance during the COVID-19 pandemic. *PLoS One*, 15(10), e0240644. https://doi.org/10.1371/journal.pone.0240644.

Dizon, A. and K. Medina (2020), Rapid Gender Analysis Philippines: Metro Manila. https://reliefweb.int/sites/reliefweb.int/files/resources/Report-HQ-CARE-Philippines-Rapid-Gender-Analysis-COVID-19_.pdf.

Durante, R., L. Guiso, and G. Gulino (2020), Civic capital and social distancing: evidence from Italians' response to COVID-19. *VoxEU.org*, 16 April. https://voxeu.org/article/civic-capital-and-social-distancing.

EON Group (2021), Rise and Respond: Trust Rewards the Agile and the Future-Ready. https://www.eon.com.ph/wp-content/uploads/2021/12/2021-Philippine-Trust-Index-Executive-Summary.pdf.

Fernandez, M. E (2021), COVID-19 mental health crisis is hitting young adults. *American Heart Association News*. 05 March. https://www.heart.org/en/news/2021/03/05/covid-19-mental-health-crisis-is-hitting-young-adults.

Garrett, L (2020), COVID-19: the medium is the message. *The Lancet*, 395(10228), pp. 942–943. doi: 10.1016/s0140-6736(20)30600-0.

Global Burden of Disease Collaborative Network. http://ghdx.healthdata.org/gbd-2019.

Jones, S. P., Imperial College London Big Data Analytical Unit, and YouGov Plc (2020), Imperial College London YouGov Covid Data Hub, v1.0. https://github.com/YouGov-Data/covid-19-tracker.

Kaur, R. and S. Desai (2021) The Elusive Transformation: Household Responsibilities and COVID-19. *Feminist Perspectives*. 01 March. https://www.kcl.ac.uk/the-elusive-transformation.

Khatiwada, S (2022), What Policies Saved Jobs During the Pandemic? Five Key Findings from Southeast Asia. Asian Development Blog. 11 January. https://blogs.adb.org/blog/what-policies-saved-jobs-during-the-pandemic-five-key-findings-from-southeast-asia.

Li, L.Z. and S. Wang (2020), Prevalence and predictors of general psychiatric disorders and loneliness during COVID-19 in the United Kingdom. *Psychiatry Research*, 291(113267), pp. 1–6. doi: 10.1016/j.psychres.2020.113267.

Ma, Z., J. Zhao, Y. Li, D. Chen, T. Wang, Z. Zhang, Z. Chen, Q. Yu, J. Jiang, F. Fan, and X. Liu (2020), Mental health problems and correlates among 746 217 college students during the coronavirus disease 2019 outbreak in China. *Epidemiology and Psychiatric Sciences*, 29(e181). doi: 10.1017/S2045796020000931.

Mazzucato, M. and R. Kattel (2020), COVID-19 and public-sector capacity. *Oxford Review of Economic Policy*, 36(S1), pp. S256–S269.

Mohammadi, M. R., Zarafshan, H., Khayam Bashi, S., Mohammadi, F., & Khaleghi, A. (2020), The Role of Public Trust and Media in the Psychological and Behavioral Responses to the COVID-19 Pandemic. Iranian journal of psychiatry, 15(3), 189–204. https://doi.org/10.18502/ijps.v15i3.3811.

Jakovljevic, M. S. Bjedov, F. Mustac, and I. Jakovljevic (2020), COVID-19 Infodemic and Public Trust from the Perspective of Public and Global Mental Health. *Psychiatria Danubina*, 32(3-4), pp. 449-457. https://doi.org/10.24869/psyd.2020.449.

Olagoke, A. A., Olagoke, O. O., and Hughes, A. M (2020), Exposure to coronavirus news on mainstream media: the role of risk perceptions and depression. *British Journal of Health Psychology*, 25(4), pp. 865–874. doi: 10.1111/bjhp.12427.

Pak, A., E. McBryde, and O.A. Adegboye (2021), Does High Public Trust Amplify Compliance with Stringent COVID-19 Government Health Guidelines? A Multi-country Analysis Using Data from 102,627 Individuals. *Risk Management and Healthcare Policy*, 14, pp. 293–302.

Saechang, O., J. Yu, and Y. Li (2021), Public Trust and Policy Compliance during the COVID-19 Pandemic: The Role of Professional Trust. Healthcare, 9(151), pp. 1–13. https://doi.org/10.3390/healthcare9020151.

Shaikh, A., E. Peprah, R. H. Mohamed, A. Asghar, N. V. Andharia, N. A. Lajot, and M. F. H. Qureshi (2021), COVID-19 and mental health: a multicountry study—the effects of lockdown on the mental health of young adults. Middle East Current Psychiatry, 28(51). pp. 1–10. https://doi.org/10.1186/s43045-021-00116-6.

WHO Philippines (2020), DOH and WHO promote holistic mental health wellness in light of World Suicide Prevention Day. WHO News Release, 10 September. https://www.who.int/philippines/news/detail/10-09-2020-doh-and-who-promote-holistic-mental-health-wellness-in-light-of-world-suicide-prevention-day.

Zhao, N. and G. Zhou (2020) Social Media Use and Mental Health during the COVID-19 Pandemic: Moderator Role of Disaster Stressor and Mediator Role of Negative Affect. *Applied Psychology: Health and Well-being*, 12(4), pp. 1019–1038. https://doi.org/10.1111/aphw.12226.